Product information

WISI LR 22 W x001

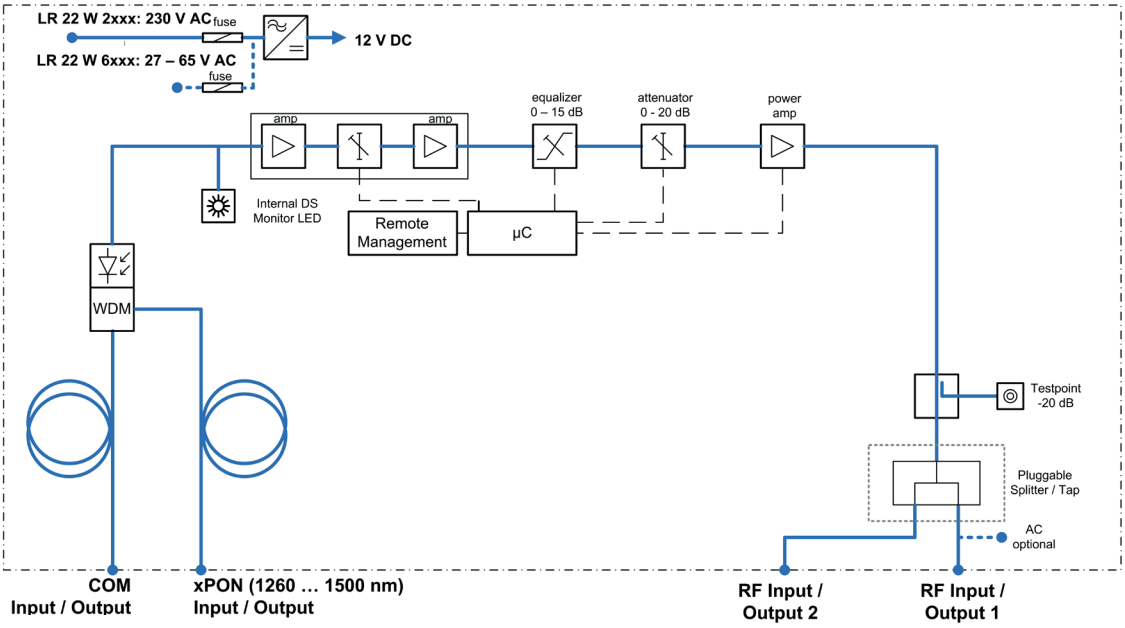
Node for RF Overlay Systems incl. PON Filter

At a glance:

- High RF output level of 109 dBµV for a full DOCSIS 3.1 load in FTTC or FTTB networks
- DOCSIS-3.1-compliant frequency range: Downstream up to 1.2 GHz, Upstream up to 204 MHz
- Pluggable diplexers enable migration towards DOCSIS 3.1 upstream
- PON pass-through port for CATV overlay signals in single-fiber FTTx networks
- Pluggable output splitters / taps for flexible configuration of the two RF outputs
- Device control via bluetooth app or via handset OH 41
- Optional: Remote control compliant to IEC 60728-14 via FSK receiver module
- Compact housing for outdoor deployment (IP66)
- Optical ALC for regulated output levels

Description

The LR 22 W x001 Fiber Node is an optical node for HFC and RF overlay applications including PON filters. Without the LT22 return channel transmitter, the LR 22 works as a standard RF overlay receiver.



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WISI LR 22 W x001

Technical data	
Downstream	
Optical input power	-8...+2 dBm
Wavelength	1550 nm (+/- 15 nm)
Frequency range	85...1218 MHz (depending on diplexer)
Noise current density	< 4,5 pA/√Hz
Attenuator downstream	0...20 dB (0,5 dB steps)
Equalizer downstream	0...15 dB (0,5 dB steps)
Outputlevel 10 dB slope (121 x QAM256), (EN60728-3-1)	109 dBµV (BER <1 exp-9), (@ 2,5% OMI)
Outputlevel flat (121 x QAM256), (EN60728-3-1)	107 dBµV (BER <1 exp-9), (@ 2,5% OMI)
Amplitude response	±0,75 dB
Test point	-20 dB
RF return loss	> 18 dB (-1 dB/oct., min. 14 dB)
Optical return loss	> 40 dB
Upstream	
with LT 22 xxxx (not included!)	
Optical output power	3 dBm
Wavelength	1270...1610 nm (CWDM grid, corresponding to order code)
Frequency range	5...204 MHz (depending on diplexer)
Flatness	±0,75 dB
Nominal RF input level	75 dBµV (OMI 5%)
Attenuator range	3%...10% (OMI attenuation)
Test point	75 dBµV (for 5% OMI per channel)
Ingress Control Switch (ICS)	0/-6/-45 dB
RF return loss	> 18 dB (-1 dB/oct., min. 14 dB)
Optical return loss	> 40 dB
PON-WDM	
PON wavelengths	1260...1500 nm
Insertion loss	<1 dB
Isolation COM -> RF downstream	>45 dB
Isolation COM -> PON	>50 dB
Isolation PON -> RF-Downstream	>45 dB
Interfaces	
Optical connectors	SC/APC (see order code)
RF Interfaces	2x PG11 (75 Ohm)
Bluetooth antenna LB 01	1x PG11
User interfaces	
Status LED downstream	Optical input power
Status LED upstream	Laser activity
Management ports RJ11	1 pcs. (for handset OH 41)
Remotely controlled parameters via FSK	DS on/off, US on/off, ICS 0/-6/-45 (with optional Rx module)
Bluetooth version	4.0 / LE
Bluetooth profiles	GATT
Bluetooth transmit power	≤ 0 dBm
Bluetooth frequency	2.4 GHz
Bluetooth app compatibility	Android 4.3 or higher

Technical data	
General data	
Supply voltage	LR 2x x 2xxx: 180...264 V AC, LR 2x x 6xxx: 27...65 V AC
Power consumption max.	16 W (including US TX)
Output impedance	75 Ω
Dimensions (width x height x depth)	232 x 145 x 86 mm
Electro Magnetic Compatibility (EMC)	EN 50083-2
Protection class	IP 66
Ambient temperature	-20...+55 °C

LR 22 W XXXX

Custom Options:
1 – default configuration
A-Z – custom configurations

Upstream Wavelength:
00 – RF Overlay with PON
43 – 1430 nm (single fiber HFC)
45 – 1450 nm (single fiber HFC)
47 – 1470 nm (single fiber HFC)
49 – 1490 nm (single fiber HFC)
51 – 1510 nm (single fiber HFC)
53 – 1530 nm (single fiber HFC)
55 – 1550 nm (single fiber HFC)
57 – 1570 nm (single fiber HFC)
59 – 1590 nm (single fiber HFC)
61 – 1610 nm (single fiber HFC)

Power Supply:
2 – 230 VAC local powered
6 – 65 VAC remote powered

Connection Options:
W – including optical filter

Type of Node:
2 – Node for HFC applications

LT 22 3XX1

Upstream Wavelength:
27 – 1270 nm
29 – 1290 nm
31 – 1310 nm
33 – 1330 nm
35 – 1350 nm
37 – 1370 nm
39 – 1390 nm
41 – 1410 nm
43 – 1430 nm
45 – 1450 nm
47 – 1470 nm
49 – 1490 nm
51 – 1510 nm
53 – 1530 nm
55 – 1550 nm
57 – 1570 nm
59 – 1590 nm
61 – 1610 nm

Output Power:
3 – 3 dBm